

GAME BOY  
COLOR



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## Preface

Fluid's main intentions behind this product are:

Firstly to continue the reproduction and conversion quality achieved on Resident Evil on the GBC. Although the two products are considerably different, the atmosphere and the "memorable" incidents within Dino Crisis will be reproduced. It is vital that the purchaser of this product receive a "scaled down" version of the original not a wholly different product. Dino Crisis on the GBC will contain all the map areas of the original, all the plot-lines, all the dinosaurs and the look and feel of the original product.

Secondly, to better Resident Evil. There has been mass acclaim for the reproduction of Resident Evil on the GBC, where most people believed they would see merely a shallow hint of the original, instead they have seen it closely shadowed by the lower format. Fluid intend to go one better with Dino Crisis. This will entail having to re-write all the Resident Evil code, but only by doing this will we be able to continue the quality push that has been started by Resident Evil.

Dino Crisis brings to Fluid's team different problems than those of Resident Evil. The GBC is a very restrictive format especially in regard to sprite sizes. Obviously a major impact of Dino Crisis is the perspective scale of the dinosaurs against the characters, this is particularly true of the T-Rex ( see later ). In addition where the zombies in Resident Evil are simple shapes/sprites, the dinosaurs are certainly not. It is for this reason that Fluid intends to deal with the dinosaurs in the way described on Page .

In addition there is an issue of the overall look of the sprites in Resident Evil although deemed to be appropriate for a the first issue Fluid intend to achieve a much more "rendered look" in both the main character sprites and the dinosaurs. The danger of a 2-D un-rendered approach would be a cutesy look, and this is the last thing we want in this product.



## **Story Background**

### **Report from undercover agent "TOM".**

I have successfully infiltrated under the guise of a researcher as planned.

I have encountered no information regarding top secret development on new-type weapons, but I have discovered there is an unexpected individual at this facility.

The man is Dr. Kirk the leading authority of our nation's energy research. Dr. Kirk was alleged to have died during the course of an experiment 3 years ago.

The reports were premature and it appears that he is currently working as the head of a non-weapon project at this facility.

The experiment is in the late stages of development. Regarding the staged accidental death. It appears that this country was somehow involved.

Recommending that necessary action be taken immediately.

### **Archive Newspaper Articles (Headlines)**

'Doctor Kirk proposes the ultimate source of clean energy.'

'Government rejects financial support. Laboratories closed.'

'Tragic disaster: Dr. Kirk deceased following an accident during an experiment'

### **Mission Objectives**

Secure Dr. Kirk and repatriate at once.



### **Regina**

The main character that the player controls throughout the game is a female Government Agent named Regina who, after receiving information from a fellow agent, is sent along with three other members of an elite force, to capture and return a scientist by the name of Dr Kirk to their government.



### **Gale**

The second member of the team is Gale. He is a 'Born & Bred' military type who's unquestioned loyalty is beyond doubt. As far as he is concerned, the mission must always come before personal feelings.

### **Rick**

The third member of the team is Rick. He is the computer and electronics wizard of the team. A good man to have around, but tends to let his feelings cloud his judgement. He can be a little hot-headed at times.



### **Dr. Kirk**

A brilliant scientific mind that until recently was assumed dead. He was working on a revolutionary new power source, but just before his 'fatal' accident all funding for his work was cut. The Government cannot allow foreign powers access to his work and therefore he must be re-patriated





## Graphical Representation

The four main characters within the game (Regina, Rick, Gale & Dr. Kirk) are scaled sprites using a scaling method.

Proposed maximum size of 80 high and 32 wide (5x4=20 objects)

To allow the main characters in the game (Regina/Rick/Gale/Dr Kirk) to contain more colour than the characters in Resident Evil, a new scaling method will be incorporated. This will split a character into 2 parts, the head and the body. Each of these body sections will then be able to contain 3 separate colours.

An added advantage of this method is that it would allow more variation in the animation of the characters such as moving the head up and down, turning the head to look sideways etc. As such, this will give the characters in the puppet show a much stronger interaction between each other.



## Other Characters

### Tom

A fellow agent who infiltrated the research facility some time ago in order to discover what weaponry they were developing there. He was surprised to discover that the scientist Dr Kirk was not dead as everyone thought but that he was carrying on his research here.

Nothing has been heard from him since his report informing that Dr Kirk was alive.

### Cooper

A fellow member of the infiltration team who parachuted in with us. However, there has been no contact with him since we started the mission and therefore can only assume that he is lost in the forest somewhere.



## Start Sequence

When you first start the game it is intended that we will have a title screen which will incorporate options for starting a new game and also to load a game from the cartridge ram bank, as used in Resident Evil CGB.

If you have previously completed Dino Crisis and you have saved the game data from this, you can load this data in and it will allow you to play extra bonus missions, otherwise known as 'Wipeout Games'

This involves playing through 3 missions, the objective of which is to kill a set number of dinosaurs within a certain time limit. These missions are set within the normal mapping areas of the game, but certain areas may be inaccessible due to locked doors etc.

The mission parameters are as follows.

Mission 1	-	8 Dinosaurs within 5 minutes
Mission 2	-	6 Dinosaurs within 4 minutes
Mission 3	-	7 Dinosaurs within 3 minutes



When starting a new game, you will then have the further option of playing in one of two game modes. Normal Mode means that you start off the game with a basic weapon (the pistol), limited ammo and limited health. You must find all the other weapons and ammunition that help you in completing the game. In Easy Mode, you start off with all weapons, more ammunition and extra health.

Once you have selected the style of game you wish to play, a computer screen is displayed showing what looks like an Internet browser style screen. The message 'YOU HAVE MAIL' is then displayed. This then goes on to brief you about various elements of storyline and mission objectives. This is quite an important part of the game and as this is not graphically intensive, it could be faithfully recreated in a very similar style.

Once the computer briefing has completed, the PSX version features a FMV sequence where the team are parachuting into the area around the research lab.



## Dinosaurs

The antagonists of this game are of course, the dinosaurs of which there are five types.

### Raptor

These fast, medium sized dinosaurs are the most abundant type. They are very dangerous as they attack with great ferocity. They can usually be killed or disabled with 4-5 shots.

### Large Dinosaurs

These dinosaurs take a larger number of shots to kill than the Raptors, but are fortunately slower moving.

The Raptors and Large Dinosaurs require a visually on-screen presence, so what will be required is a scaling method that allows these enemies to be broken up into three parts allowing the body, head and tail to be scaled separately (see previous page) This will allow the tail to be moveable and independent of the rest of the body allowing it's tail to swing about creating a more flexible animating technique.

Proposed maximum size of 80 high and 48 wide (5x6=30 objects)

### Small Dinosaurs

These dinosaurs are more nuisance than dangerous and appear through certain air vents and gaps in walls. They can be easily killed by a single pistol shot.

The Small Dinosaurs will need to have their own miniature scaling system thus allowing two of these to be displayed at one time.

Proposed maximum size of 32 high and 24 wide (2x3=12 objects)

### Pteranodon





These flying dinosaurs appear in certain of the outside areas and although they can be killed, more take there place.

The Pteranodon (Flying Dinosaur) sprites require a modified scaling routine that will cater for a sprite with a wider dimension than normal. Proposed maximum size of 32 high and 48 wide (2x6=12 objects)

### Overview

The Colour Game Boy is only able to display up to 40 sprite objects on-screen at any given time, therefore allotting sprites for each kind of dinosaur needs to be carefully prepared.

As a result of this, each type of dinosaur will have it's own method of display (see above) in order for it to be processed as efficiently as possible.

As an example, here is how one of the dinosaurs would be processed.

This dinosaur would be split into three sections and each section would be scaled separately. This will allow just enough sprites to display the main character and one dinosaur of this type on screen at any given time.

Also, as with the main character, because of the way that the head, tail and legs are separate items, a greater variety of animations can be created. E.g.:- 10 head animations, 16 walk animations, 16 run animations, 10 tail animations.





## T-Rex

The T-Rex appears a number of times within the game, although the last time it appears is within one of several endings. The T-Rex cannot be destroyed until it's last appearance and this ends the game. Regina can shoot at the T-Rex and can stun or delay its progress and allow her to escape from the T-Rex. Here is a list and brief description of when the T-Rex appears:-

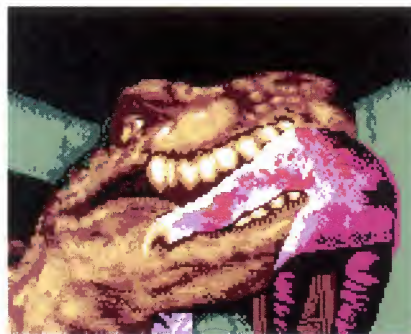
1. The T-Rex smashes its head through an inside office window and lunges at Regina.
2. The T-Rex crashes into an outside walkway and smashes the walkway so that Regina cannot go back.
3. The T-Rex appears through some metal shutters in the loading bay and starts to chase Regina. During it's efforts it smashes an overhead electrical device and crashes to the floor apparently electrocuted.
4. The T-Rex appears in an outside courtyard and smashes helicopter to the ground. It then proceeds to chase Regina around the helicopter's burnt out remains.
5. This is the first ending and is a sequence of T-Rex smashing through a door, chasing Regina while Regina is stood on a moving platform and then Regina enters a helicopter and escapes with T-Rex being blown up. Once Regina has evaded the T-Rex when she is being chased then she just has to go to the helicopter and it is then all sequenced.
6. This is the second ending and is a sequence of T-Rex smashing through a wall, chasing Regina around a room and then Regina enters a hovercraft and escapes with T-Rex being burnt alive. Once Regina has evaded the T-Rex she just has to go to the hovercraft and then it is all sequenced.
7. This is the third ending and shows the hovercraft speeding away and the T-Rex following in pursuit. Regina climbs onto the outside of the hovercraft and has to shoot at the T-Rex to halt his progress until Rick can use the missile launcher to stop the T-Rex.





## Graphical Representation

The T-Rex plays a major part in Dino Crisis it is therefore essential the Fluid reproduce this in both terms of look and effect on the player.



A fundamental issue is how Fluid will deal with the T-Rex. Obviously this will be the most difficult thing to reproduce on the GBC, the main difficulty is the size of the T-Rex or more appropriately the perspective scale of the T-Rex against the character. This would be impossible to reproduce accurately drawing the dinosaur as a sprite, the GBC would not be able to do this. Instead Fluid intend to create proprietary technology to deal with this.

For example where the T-Rex bursts through the window it is intended that the dinosaur is drawn as background graphic which both animates and scales giving the size perspective required against the character, in addition, the shattering pieces of glass would be drawn as sprites and after these disappeared the tongue would then be an animating sprite. The overall effect using this method would be close if not exactly the same as the PSX. Obviously this same method can be used for other instances where the T-Rex is seen but unfortunately not all. The scene where the T-Rex chases Regina around the burning helicopter would not be possible to reproduce using this method. Instead it would be Fluid's intention to pan out from this scene making the character sprite small in scale to the overall screen. The T-Rex's size could then be put in perspective scale against this. To assist the directional information to the player when in this perspective we would use a directional arrow that seconded as a health bar/indicator. This arrow would be used as an aid throughout the game but would be essential in this scene. Fluid would go on to reproduce the flames of the helicopter, again re-creating faithfully the look and feel of the original.





## **Game Features**

### **Status Screen**

The status screen in Dino Crisis is essentially the same as the one in Resident Evil. However, its layout is more elaborate and certain features such as mapping and mixing objects are incorporated. Also, your character is able to carry more objects and therefore the item windows must now display more content.

### **Mapping**

The game contains 7 mapping areas and in total there are just over 100 rooms. This is very similar to Resident Evil with the exception that some of the rooms are considerably bigger, but it is very probable that Dino Crisis will need about the same number of cut screens as Resident Evil.

In terms of difficulty of mapping, the rooms in Dino Crisis are not much more detailed. Certain doors or rooms are highlighted within the Status screens mapping option giving the player an indication of what to do or where to go to next.

### **Room to Room Sequences**

The main character features in the room to room sequences but whereas in Resident Evil the door scales in 3D, in Dino Crisis, Regina scales in 3D and moves in front and behind of the door.

This actually makes it a lot easier to program, yet still giving a much better visual image. The doors behave in a more varied manner with doors splitting, swinging open and sliding to let Regina through.

The stairs are viewed from a side-on 45° angle and again should be easier to create with Regina walking up or down them.

### **Wall Supply Boxes**

In certain rooms there are supply boxes/safes built into the wall, these are coloured Red, Green and Yellow. Once a key has been found to open the red supply boxes then all red supply boxes throughout the game can be accessed. You can take, swap or store objects in these boxes.

### **Danger Points**





When a dinosaur attacks Regina, or Regina has been knocked onto the floor with a Dinosaur standing over her, a DANGER icon flashes on screen. This is to tell the player that they must press all buttons as fast as possible to enable Regina to stand back up otherwise the Dinosaur will attack again very quickly.

### **Puzzles and Sub Games**

There are several sub games within Dino Crisis. Some of these involve just inputting a code that may have been found earlier in the game, others require a code to be inputted that is derived from other code words on the screen. Another requires coloured 'batteries' to be maneuvered into a certain order. Below is a brief list of the types of games.

Assembly of initialiser and stabiliser game:-

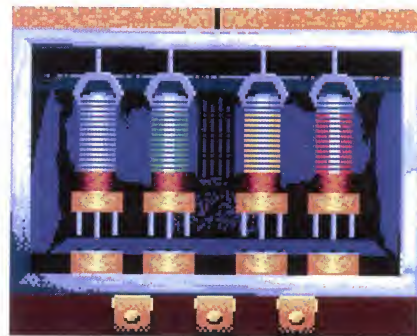
Memory game:-

Jigsaw style tiling game:-

Word game:-

Pipe laying game:-

Logic game:-





## In-Game Pickups

Boxes can be picked up within the game and these contain certain objects. The boxes themselves are basic in design and there are only 2 different types, one is a square green box and the other is a rectangular white box. One other item that can be picked up appears as a circular shiny image, this tends to be a key of some description.

The objects in Dino Crisis are very similar to Resident Evils in usage. DDK keys open certain doors, I.D. cards open security doors and Disks allow computers to be used. Very straightforward. Here is a list of objects and a brief description.

DDK KEYS	-	ELECTRONIC KEY CARDS FOR OPENING DOORS
DOOR KEYS	-	SELF EXPLANATORY
I.D. CARDS	-	USED TO OPERATE COMPUTERS
LEVEL A, B & C PASS CARDS	-	USED TO OPEN A, B & C DOORS
E.V. CARDS	-	
FINGER PRINT MINI COMPUTER	-	USED TO TAKE FINGER PRINTS IN GAME
RADIO	-	USED TO CONTACT RICK
DOCUMENT PAGES	-	SHOWS GAME INFORMATION
DISKS	-	USED TO OPERATE COMPUTERS
SUPPLY BOX KEYS	-	TO OPEN SUPPLY BOXES
LEO & SOL KEYS	-	SAFE KEYS
EX-L	-	
EX-B3 GREEN	-	USED TO OPERATE CRANE
EX-B3 YELLOW	-	USED TO OPERATE CRANE
EX-B3 BLUE	-	USED TO OPERATE CRANE
B2 CARDS	-	
PORT CARDS	-	
INITIALISER - 2 PARTS	-	ASSEMBLE TO MAKE INITIALISER
STABILISER - 2 PARTS	-	ASSEMBLE TO MAKE STABILISER
INITIALISER	-	USE WITH GENERATOR
STABILISER	-	USE WITH GENERATOR
FUEL CONTAINER	-	
BLUE MEDICAL BAG	-	HEALTH
YELLOW MEDICAL BAG	-	HEALTH
BLUE MIX	-	USE WITH MEDICAL BAG OR DARTS
RED MIX	-	USE WITH MEDICAL BAG OR DARTS
ORANGE MIX	-	USE WITH MEDICAL BAG OR DARTS
RED DART WITH GREEN MIX	-	STUN AMMO FOR SHOTGUN
RED DART WITH YELLOW MIX	-	STUN AMMO FOR SHOTGUN
9MM BULLETS	-	AMMO FOR PISTOL
BLUE SHELLS	-	AMMO FOR SHOTGUN
RED SHELLS	-	AMMO FOR SHOTGUN
GREEN GRENADES	-	AMMO FOR G LAUNCHER
RED GRENADES	-	AMMO FOR G LAUNCHER
S+W BULLETS	-	AMMO FOR PISTOL
2 EXTRA PARTS FOR SHOTGUN	-	IMPROVES SHOTGUN PERFORMANCE
EXTRA PART FOR PISTOL	-	IMPROVES PISTOL PERFORMANCE
EXTRA PART FOR G LAUNCHER	-	IMPROVES G LAUNCHER PERFORMANCE

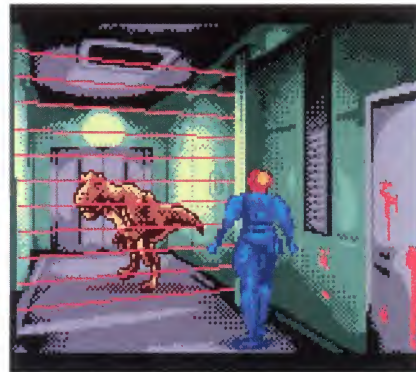


## Graphic Presentation

### Background Graphics

Dino Crisis' camera view is changeable on the PSX version, giving the effect of the camera panning with the motion of the main character, therefore not having the cut screens associated with Resident Evil. As the 'Pan & Scan' effect would be unworkable on the CGB we propose that a similar method to Resident Evil be employed in the main rooms of the game, whilst also using an animation effect to allow the player to walk along corridors giving the impression of improved 3D. All the rooms will be re-rendered into a CGB format and will therefore need to be built as 3D models

beforehand. This will then allow us to use exact 3D mapping. Resident Evil used camera projections that could not take advantage of using scaled sprites and therefore we are developing a new technology that will use camera projections that flatter the scaled sprites and create a smoother flow of gameplay.



### Puppet Shows

A new approach to the puppet shows will need to be employed to provide the look and feel that we wish to achieve in converting the PSX puppet shows onto the GBC format. We are planning to use at least two differing methods in order to do this. The first is similar in style to the one used in Resident Evil GBC where the characters can move around the cut screens and communicate with each other via text boxes. The second method will involve extra screens where one or more of the characters are static images with animated sprite overlay of heads, arms, hands etc. allowing us to give the impression of movements. This will allow large characters to be displayed and to create a very close conversion of the PSX version's puppet shows and ultimately allow us to show very strong graphical and storytelling parts of the game.





### Other Graphic Features

We propose that as well as capturing the gameplay of Dino Crisis PSX, we wish to also attempt to capture the atmosphere of the game in conversion to CGB. Therefore a number of items that, whilst not adding or detracting to the gameplay, would add such atmosphere will be carried over to the CGB conversion.

These include the moths flying around the lights outside and also blood dripping from Regina onto the floor after she has been attacked.

Other features that we propose would enhance the game play include an arrow that would show you which direction you were facing and also a Weapons Status which would show the current weapon selected.

These would be located in a status bar at the bottom of the screen.



Example of Blood Drops



Example of Direction Arrow





## Control Method

The following control keys are to be used in the action sequence part of the game..

- |           |   |
|-----------|---|
| Up        | - Move Forward  |
| Down      | - Move Backwards  |
| Left      | - Rotate Left   |
| Right     | - Rotate Right  |
| A         | - Pick up object/open door/activate switch (if weapon not drawn)<br>- Fire Weapon (If weapon drawn) |
| B         | - Draw weapon   |
| B with UP | - Run Forwards  |
| Start     | - Begin game (On title screen)<br>- Pause (When in game)  |
| Select    | - Enter status screen   |

The following control keys are to be used in the Status Screen part of the game..

- |       |                      |
|-------|----------------------|
| Up    | - Cursor Up          |
| Down  | - Cursor Down        |
| Left  | - Cursor Left        |
| Right | - Cursor Right       |
| A     | - Select Item        |
| B     | - Exit Status Screen |